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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/714,080   | 11/14/2003  | Timothy Mancour      | 16234BAUS02U        | 9529             |
| 34645  | 7590        | 12/14/2007           | EXAMINER            |                  |
| JOHN C. GORECKI, ESQ.<br>P.O BOX 553<br>CARLISLE, MA 01741 |             |                      | LEVITAN, DMITRY     |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2616                |                  |
|  |             |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|  |             |                      | 12/14/2007          | ELECTRONIC       |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[john@gorecki.us](mailto:john@gorecki.us)

|                              |                            |                  |
|------------------------------|----------------------------|------------------|
| <b>Office Action Summary</b> | Application No.            | Applicant(s)     |
|                              | 10/714,080                 | MANCOUR ET AL.   |
|                              | Examiner<br>Dmitry Levitan | Art Unit<br>2616 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 04 December 2007.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6,8-15,17 and 18 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-6,8-15,17 and 18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 12/04 2007 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

Amendment, filed 12/04/07, has been entered. Claims 1-6, 8-15, 17 and 18 remain pending.

***Drawings***

The drawings were received on 11/21/07. These drawings are approved.

In light of Applicant's amendment, the objection to the drawings has been withdrawn.

***Specification***

In light of Applicant's amendment, the objection to the disclosure has been withdrawn.

***Claim Rejections - 35 USC § 112***

In light of Applicant's amendment, the rejection of claims 5, 6 and 11-18 under 35 U.S.C. 112, second paragraph, has been withdrawn.

***Claim Rejections - 35 USC § 103***

1. Claims 1-6, 9-15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gandhi (US Pub. 2005/0078602) in view of Blake (Blake. An Architecture for Differentiated Services, RFC 2475, December, 1998).
2. Regarding claims 1-3, 11, 13 and 15, Gandhi substantially teaches the limitations of claims:

a method of allocating bandwidth at a network element (allocating bandwidth to a customer on a network [0002]-[0008]), the method comprising the steps of:

metering first traffic for a first traffic flow to ascertain first in-profile traffic for the first flow using first in-profile token bucket, wherein the ascertained first in-profile traffic is a portion of the first traffic for which there is sufficient tokens in the first in profile token bucket (classifying the packets of traffic of service V1 as conforming/in-profile according to the predetermined bandwidth profile, [0013]-[0014], as shown on Fig. 3 and disclosed on [0046]-[0052], wherein there is “little or no traffic” for service V1, so there are sufficient number of tokens in the first token bucket);

metering second traffic for a second traffic flow to ascertain second in-profile traffic for the second flow wherein the ascertained first in-profile traffic is a portion of the second traffic for which there is sufficient tokens in the second in profile token bucket (classifying the packets of traffic of service V2 as conforming or not conforming according to the predetermined bandwidth profile, [0013]-[0014], as shown on Fig. 3 and disclosed on [0046]-[0052], wherein there is “little or no traffic” for service V2, so there are sufficient number of tokens in the second token bucket); and

commonly metering first traffic that has not been ascertained to be first in-profile traffic with second traffic that has not been ascertained to be second in-profile traffic to ascertain commonly metered traffic using a third common token bucket, wherein the ascertained commonly metered traffic is a portion of the first traffic that has not been ascertained to be first in-profile traffic and a portion of the second traffic that has not been ascertained to be second in-profile traffic for which there is sufficient tokens in the third common token bucket (allocating

excess bandwidth from first and second services, V1 and V2, or excess tokens from buckets 305 and 325 as shown on Fig. 3 and [0046]-[0052], to the third service V3, shown as a common bucket 355 for buckets 305 and 325 on Fig. 3, wherein the excess traffic of first service, excess tokens from the first bucket 305 are allocated, as another implementation of the method, directly to the third common bucket 355, as disclosed on [0049]).

In addition, Gandhi teaches traffic metering according to IETF RFC 2697 and 2698, which are incorporated by reference [0005].

Gandhi does not teach traffic flow as a Per Hop Basis group (PHB).

Blake teaches per-hop behavior (PHB) as a guarantee a minimal bandwidth allocation of a link to a behavior aggregate (RFC 2475, 2.4, Per-Hop behaviors).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using PHB of Blake to the system of Gandhi to improve the system compatibility with a popular Internet Architecture of RFC 2475.

In addition, regarding claim 2, Gandhi teaches a network element 210, shown on Fig. 2, inherently comprising a port, because port is essential for the network element 210 to connect with network 205.

3. Regarding claim 4, Gandhi teaches classifying the incoming traffic in first and second types of services, each characterized by appropriate bandwidth profile, [0013] and [0014].

4. Regarding claim 5, 6, 9, 10, 12, 17 and 18, Gandhi teaches marking the traffic in-profile as green and the traffic out-of-profile as yellow [0014] and [0016], wherein the marking method is applied to both traffics V1 and V2, shown on Fig. 2 and marking non-compliant traffic as red [0055].

Gandhi does not teach marking the common traffic flow as yellow and red.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using marking the common traffic as yellow and the common non-compliant traffic as red to the system of Gandhi to implement the coloring scheme to the common traffic to prioritize handling of the packets in the common traffic.

5. Regarding claim 14, Gandhi teaches allocation rules, comprising a committed information rate and a committed burst rate (bandwidth allocation comprising committed information rates and peak information rates [0023]).

6. Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gandhi in view of Balachandran (US Pub. 2004/0208183).

Gandhi substantially teaches the limitations of claim 8 (see claims 1 and 7 rejection above).

Gandhi does not teach providing no tokens for a bucket to set the profile to zero. Balachandran teaches providing no tokens to user, freezing the tokens to user, experiencing network problems [0099].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add providing no tokens for a token bucket of Balachandran to the system of Gandhi to improve the system operation with a failed network connection to stop the useless transmission.

***Response to Arguments***

1. Applicant's arguments filed 12/04/07 have been fully considered but they are not persuasive.

On pages 7-9 of the Response, Applicant argues that Gandhi teaches a system with two token buckets, as shown on Fig. 4, which does not teach the limitations of amended claims.

Examiner respectfully disagrees.

Gandhi clearly teaches a system with three buckets 305, 325 and 355, shown on Fig. 3 and described in the appropriate portion of the disclosure, as indicated in the previous and current Office action.

Examiner did not reject the claims on a basis of the system of Gandhi embodiment shown on Fig. 4.

Therefore, Applicant arguments, directed to the implementation of Gandhi system on Fig. 4, are irrelevant, as they are not directed to the portion of Gandhi used for the claims rejection.

In addition, Applicants arguments directed to Gandhi implementation of CIR and PIR, are not directed to limitations of claim 14, which are limited only to "comprising at least a committed information rate and committed burst rate" without any in-depth requirements.

On page 9 of the Response, Applicant argues that it would not be obvious to combine the references of Gandhi and Blake.

Examiner respectfully disagrees.

Gandhi teaches using IETF Request for Comments 2697 and 2698 on [0005] and incorporates these documents in the disclosure. Therefore, it would be obvious for one of the ordinary skills in the art to add PHB concept of the other related IETF document RFC 2475, Architecture for Differentiated Services, which is directed to the same issue of scheduling of packets, to the teachings of Gandhi to make the system compatible with a popular Architecture.

In addition, Admitted Prior Art, disclosed as a conventional way on [0012], utilizes the PHB concept of RFC 2475 with the token buckets system.

### *Conclusion*

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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